ABSTRACT OF THE DISCLOSURE

A terminal acquires a network prefix of a network connected thereto, and determines whether that network prefix is identical to an initial network prefix. When the terminal determines that the two prefixes are different, the terminal reads the network prefix of each of a destination address and a source address in a received packet. When the read network prefix is different from the initial network prefix, the terminal substitutes the initial network prefix for the read network prefix, thereby generating a pseudo header. The terminal authenticates the received packet using the generated pseudo header.